

Assignment: discuss diseases of the renal system

Answer:

Renal system disease, any of the diseases or disorders that affect the human urinary system. They include benign and malignant tumours, infections and inflammations, and obstruction by calculi.

1. **Bladder infections** - (cystitis) usually caused by bacteria. A urinary tract infection (UTI) is an infection from microbes. These are organisms that are too small to be seen without a microscope. Most UTIs are caused by bacteria, but some are caused by fungi and in rare cases by viruses. UTIs are among the most common infections in humans.

A UTI can happen anywhere in your urinary tract. Your urinary tract is made up of your kidneys, ureters, bladder, and urethra. Most UTIs only involve the urethra and bladder, in the lower tract. However, UTIs can involve the ureters and kidneys, in the upper tract. Although upper tract UTIs are more rare than lower tract UTIs, they're also usually more severe.

2. **Enlarged prostate** - in men, this can make it difficult to empty the bladder. In men, urine flows from the bladder through the urethra. BPH is a benign (non-cancerous) enlargement of the prostate that blocks the flow of urine through the urethra. The prostate cells gradually multiply, creating an enlargement that puts pressure on the urethra -- the "chute" through which urine and semen exit the body.

As the urethra narrows, the bladder has to contract more forcefully to push urine through the body.

Over time, the bladder muscle may gradually become stronger, thicker, and overly sensitive; it begins to contract even when it contains small amounts of urine, causing a need to urinate frequently. Eventually, the bladder muscle cannot overcome the effect of the narrowed urethra so urine remains in the bladder and it is not completely emptied.

Symptoms of enlarged prostate can include:

- A weak or slow urinary stream
 - A feeling of incomplete bladder emptying
 - Difficulty starting urination
 - Frequent urination
 - Urgency to urinate
 - Getting up frequently at night to urinate
 - A urinary stream that starts and stops
 - Straining to urinate
 - Continued dribbling of urine
 - Returning to urinate again minutes after finishing
3. **Incontinence** - when urine leaks out of the urethra. Urinary incontinence — the loss of bladder control — is a common and often embarrassing problem.

The severity ranges from occasionally leaking urine when you cough or sneeze to having an urge to urinate that's so sudden and strong you don't get to a toilet in time.

Though it occurs more often as people get older, urinary incontinence isn't an inevitable consequence of aging. If urinary incontinence affects your daily activities, don't hesitate to see your doctor. For most people, simple lifestyle changes or medical treatment can ease discomfort or stop urinary incontinence.

Symptoms

Many people experience occasional, minor leaks of urine. Others may lose small to moderate amounts of urine more frequently.

- 4. Kidney infections** - when a bladder infection 'backs up' the ureters. Kidney infection (pyelonephritis) is a type of urinary tract infection (UTI) that generally begins in your urethra or bladder and travels to one or both of your kidneys.

A kidney infection requires prompt medical attention. If not treated properly, a kidney infection can permanently damage your kidneys or the bacteria can spread to your bloodstream and cause a life-threatening infection.

Kidney infection treatment, which usually includes antibiotics, might require hospitalization.

Symptoms

Signs and symptoms of a kidney infection might include:

- Fever
- Chills
- Back, side (flank) or groin pain
- Abdominal pain
- Frequent urination
- Strong, persistent urge to urinate
- Burning sensation or pain when urinating
- Nausea and vomiting
- Pus or blood in your urine (hematuria)
- Urine that smells bad or is cloudy

- 5. Kidney stones** - caused by infection and high blood levels of calcium.

Symptoms

A kidney stone usually will not cause symptoms until it moves around within your kidney or passes into your ureters — the tubes connecting the kidneys and the bladder. If it becomes lodged in the ureters, it may block the flow of urine and cause the kidney to swell and the ureter to spasm, which can be very painful. At that point, you may experience these signs and symptoms:

- Severe, sharp pain in the side and back, below the ribs
- Pain that radiates to the lower abdomen and groin
- Pain that comes in waves and fluctuates in intensity
- Pain or burning sensation while urinating